

1 **What Is Claimed Is:**

1 1. A demand dispatching method, comprising the steps
2 of:
3 receiving a first demand;
4 dividing the first demand into a low risk demand having
5 a first order rate and a high risk demand having
6 a second order rate;
7 determining an expected quantity of a first
8 fabrication; and
9 dispatching a first quantity of the low risk demand and
10 a second quantity of the high risk demand to the
11 first fabrication according to the expected
12 quantity, and the first order rate and the second
13 order rate for the low risk demand and the high
14 risk demand, respectively.

1 2. The demand dispatching method as claimed in claim
2 1, wherein the step of dispatching the first quantity of the
3 low risk demand and the second quantity of the high risk
4 demand to the first fabrication utilizes a dispatching rule
5 as follows:

6 $EQ = FQ * FOR + SQ * SOR$,
7 wherein EQ is the expected quantity, FQ is the first
8 quantity, FOR is the first order rate, SQ is the
9 second quantity, and SOR is the second order
10 rate.

1 3. The demand dispatching method as claimed in claim
2 1 further comprising dispatching a third quantity of the low
3 risk demand of a second demand dispatched to a second
4 fabrication to the first fabrication if the difference
5 between the expected quantity and the first quantity is
6 exceeding a predetermined ratio of the expected quantity.

1 4. The demand dispatching method as claimed in claim
2 3 further comprising dispatching a remnant quantity of the
3 high risk demand of the first demand to the second
4 fabrication.

1 5. The demand dispatching method as claimed in claim
2 3 further comprising the steps of:
3 monitoring the variation in the first quantity of the
4 low risk demand of the first fabrication; and
5 dispatching a pilot order to the first fabrication if
6 the variation in the first quantity of the low
7 risk demand shows a downward trend.

1 6. A demand dispatch system, comprising:
2 a risk database recording risk information for a first
3 demand; and
4 an allocation planning module to receive the first
5 demand, divide the first demand into a low risk
6 demand having a first order rate and a high risk
7 demand having a second order rate according to
8 the risk information, determine an expected

9 quantity of a first fabrication, and dispatch a
10 first quantity of the low risk demand and a
11 second quantity of the high risk demand to the
12 first fabrication according to the expected
13 quantity, and the first order rate and the second
14 order rate for the low risk demand and the high
15 risk demand, respectively.

1 7. The demand dispatch system as claimed in claim 6,
2 wherein the allocation planning module dispatches the first
3 quantity of the low risk demand and the second quantity of
4 the high risk demand to the first fabrication utilizing a
5 dispatching rule as follows:

6 $EQ = FQ * FOR + SQ * SOR$,
7 wherein EQ is the expected quantity, FQ is the first
8 quantity, FOR is the first order rate, SQ is the
9 second quantity, and SOR is the second order
10 rate.

1 8. The demand dispatch system as claimed in claim 6,
2 wherein the allocation planning module further dispatches a
3 third quantity of the low risk demand of a second demand
4 dispatched to a second fabrication to the first fabrication
5 if the difference between the expected quantity and the
6 first quantity is exceeding a predetermined ratio of the
7 expected quantity.

1 9. The demand dispatch system as claimed in claim 8,
2 wherein the allocation planning module further dispatches a
3 remnant quantity of the high risk demand of the first demand
4 to the second fabrication.

1 10. The demand dispatch system as claimed in claim 6,
2 wherein the allocation planning module further monitors the
3 variation in the first quantity of the low risk demand of
4 the first fabrication, and dispatches a pilot order to the
5 first fabrication if the variation in the first quantity of
6 the low risk demand shows a downward trend.

1 11. A demand dispatching method in an IC foundry,
2 comprising the steps of:
3 receiving a first demand for a first IC product;
4 dividing the first demand into a low risk demand having
5 a first order rate and a high risk demand having
6 a second order rate;
7 determining an expected quantity of a first
8 fabrication; and
9 dispatching a first quantity of the low risk demand and
10 a second quantity of the high risk demand to the
11 first fabrication according to the expected
12 quantity, and the first order rate and the second
13 order rate for the low risk demand and the high
14 risk demand, respectively.

1 12. The demand dispatching method as claimed in claim
2 11, wherein the step of dispatching the first quantity of
3 the low risk demand and the second quantity of the high risk
4 demand to the first fabrication utilizes a dispatching rule
5 as follows:

6 $EQ = FQ * FOR + SQ * SOR,$

7 wherein EQ is the expected quantity, FQ is the first
8 quantity, FOR is the first order rate, SQ is the
9 second quantity, and SOR is the second order
10 rate.

1 13. The demand dispatching method as claimed in claim
2 11 further comprising dispatching a third quantity of the
3 low risk demand of a second demand for a second IC product
4 dispatched to a second fabrication to the first fabrication
5 if the difference between the expected quantity and the
6 first quantity is exceeding a predetermined ratio of the
7 expected quantity.

1 14. The demand dispatching method as claimed in claim
2 13 further comprising dispatching a remnant quantity of the
3 high risk demand of the first demand to the second
4 fabrication.

1 15. The demand dispatching method as claimed in claim
2 11 further comprising the steps of:
3 monitoring the variation in the first quantity of the
4 low risk demand of the first fabrication; and
5 dispatching a pilot order for a third IC product to the
6 first fabrication if the variation in the first
7 quantity of the low risk demand shows a downward
8 trend.

1 16. A demand dispatch system in an IC foundry,
2 comprising:
3 a risk database recording risk information for a first
4 demand for a first IC product; and
5 an allocation planning module to receive the first
6 demand, divide the first demand into a low risk
7 demand having a first order rate and a high risk
8 demand having a second order rate according to
9 the risk information, determine an expected
10 quantity of a first fabrication, and dispatch a
11 first quantity of the low risk demand and a
12 second quantity of the high risk demand to the
13 first fabrication according to the expected
14 quantity, and the first order rate and the second
15 order rate for the low risk demand and the high
16 risk demand respectively.

1 17. The demand dispatch system as claimed in claim 16,
2 wherein the allocation planning module dispatches the first
3 quantity of the low risk demand and the second quantity of
4 the high risk demand to the first fabrication utilizing a
5 dispatching rule as follows:

6 $EQ = FQ \cdot FOR + SQ \cdot SOR,$

7 wherein EQ is the expected quantity, FQ is the first
8 quantity, FOR is the first order rate, SQ is the
9 second quantity, and SOR is the second order
10 rate.

1 18. The demand dispatch system as claimed in claim 16,
2 wherein the allocation planning module further dispatches a
3 third quantity of the low risk demand of a second demand for
4 a second IC product dispatched to a second fabrication to
5 the first fabrication if the difference between the expected
6 quantity and the first quantity is exceeding a predetermined
7 ratio of the expected quantity.

1 19. The demand dispatch system as claimed in claim 18,
2 wherein the allocation planning module further dispatches a
3 remnant quantity of the high risk demand of the first demand
4 to the second fabrication.

1 20. The demand dispatch system as claimed in claim 16,
2 wherein the allocation planning module further monitors the
3 variation in the first quantity of the low risk demand of
4 the first fabrication, and dispatches a pilot order for a
5 third IC product to the first fabrication if the variation

6 in the first quantity of the low risk demand shows a
7 downward trend.

1 21. A method of IC product manufacturing, comprising
2 the steps of:
3 receiving a first demand for a first IC product;
4 dividing the first demand into a low risk demand having
5 a first order rate and a high risk demand having
6 a second order rate;
7 determining an expected quantity of a first
8 fabrication;
9 dispatching a first quantity of the low risk demand and
10 a second quantity of the high risk demand to the
11 first fabrication according to the expected
12 quantity, and the first order rate and the second
13 order rate for the low risk demand and the high
14 risk demand, respectively;
15 receiving a purchase order for the first IC product;
16 and
17 manufacturing the first IC product corresponding to the
18 purchase order in the first fabrication.

1 22. The method of IC product manufacturing as claimed
2 in claim 21, wherein the step of dispatching the first
3 quantity of the low risk demand and the second quantity of
4 the high risk demand to the first fabrication utilizes a
5 dispatching rule as follows:

6
$$EQ = FQ * FOR + SQ * SOR,$$

7 wherein EQ is the expected quantity, FQ is the first
8 quantity, FOR is the first order rate, SQ is the

9 second quantity, and SOR is the second order
10 rate.

1 23. The method of IC product manufacturing as claimed
2 in claim 21 further comprising dispatching a third quantity
3 of the low risk demand of a second demand for a second IC
4 product dispatched to a second fabrication to the first
5 fabrication if the difference between the expected quantity
6 and the first quantity is exceeding a predetermined ratio of
7 the expected quantity.

1 24. The method of IC product manufacturing as claimed
2 in claim 23 further comprising dispatching a remnant
3 quantity of the high risk demand of the first demand to the
4 second fabrication.

1 25. The method of IC product manufacturing as claimed
2 in claim 21 further comprising the steps of:
3 monitoring the variation in the first quantity of the
4 low risk demand of the first fabrication; and
5 dispatching a pilot order for a third IC product to the
6 first fabrication if the variation in the first
7 quantity of the low risk demand shows a downward
8 trend.

1 26. An IC product produced by the process of:
2 receiving a first demand for the IC product;
3 dividing the first demand into a low risk demand having
4 a first order rate and a high risk demand having
5 a second order rate;
6 determining an expected quantity of a first
7 fabrication;
8 dispatching a first quantity of the low risk demand and
9 a second quantity of the high risk demand to the
10 first fabrication according to the expected
11 quantity, and the first order rate and the second
12 order rate for the low risk demand and the high
13 risk demand, respectively;
14 receiving a purchase order for the IC product; and
15 manufacturing the IC product corresponding to the
16 purchase order in the first fabrication.

1 27. The IC product as claimed in claim 26, wherein the
2 step of dispatching the first quantity of the low risk
3 demand and the second quantity of the high risk demand to
4 the first fabrication utilizes a dispatching rule as
5 follows:

6
$$EQ = FQ \cdot FOR + SQ \cdot SOR,$$

7 wherein EQ is the expected quantity, FQ is the first
8 quantity, FOR is the first order rate, SQ is the second
9 quantity, and SOR is the second order rate.

1 28. The IC product as claimed in claim 26 further
2 comprising dispatching a third quantity of the low risk
3 demand of a second demand for a second IC product dispatched
4 to a second fabrication to the first fabrication if the
5 difference between the expected quantity and the first
6 quantity is exceeding a predetermined ratio of the expected
7 quantity.

1 29. The IC product as claimed in claim 28 further
2 comprising dispatching a remnant quantity of the high risk
3 demand of the first demand to the second fabrication.

1 30. The IC product as claimed in claim 21 further
2 comprising the steps of:
3 monitoring the variation in the first quantity of the
4 low risk demand of the first fabrication; and
5 dispatching a pilot order for a third IC product to the
6 first fabrication if the variation in the first
7 quantity of the low risk demand shows a downward
8 trend.